

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Sulayman Dib-Hajj *et al.*

Application No. 09/856,274

Group Art Unit: 1614

Filed: May 18, 2001

Examiner: Not Assigned

For: Effects of GDNF and NGF on Sodium Channels in DRG Neurons

Commissioner for Patents
Washington, D.C. 20231

INFORMATION DISCLOSURE STATEMENT UNDER 37 C.F.R. 1.97(b)

Pursuant to 37 C.F.R. 1.56 and 1.97(b), Applicants bring to the attention of the Examiner the documents listed on the attached PTO-1449. This Information Disclosure Statement is being filed to the best of the undersigned's knowledge before the mailing date of a first Office Action on the merits for the above-referenced application. Accordingly, Applicants do not believe that a fee is due for filing this paper.

Copies of the listed documents are attached. Also attached is a single reference cited in the International Search Report which issued in International Application PCT/US99/27368 of which the above-referenced application is a U.S. National Phase Application under 35 U.S.C. 371.

Applicants respectfully request that the Examiner consider the listed documents and evidence that consideration by making appropriate notations on the attached form. This submission does not represent that a search has been made or that no better art exists and does not constitute an admission that the above-listed documents are material or constitute prior art. If the Examiner applies the documents as prior art against any claim in the application and Applicants determine that the cited documents do not constitute prior art under United States law, Applicants reserve the right to present to the Office the relevant facts and law regarding the appropriate status of such document.


Applicants further reserve the right to take appropriate action to establish the patentability of the disclosed invention should one or more of the documents be applied against the claims of the present application.

Except for issue fees payable under 37 C.F.R. 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. 1.16 and 1.17 which may be required, including any required extension of time fees, or

credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a **constructive petition for extension of time** in accordance with 37 C.F.R. 1.136(a)(3).

Dated: **April 3, 2002**
Morgan, Lewis & Bockius LLP
Customer No. **09629**
1111 Pennsylvania Avenue, N.W.
Washington, D.C. 20004
202-739-3000

Respectfully submitted
Morgan, Lewis & Bockius LLP



Robert Smyth
Registration No. 50,801



RECEIVED

APR 04 2002

TECH CENTER 1600/2900

INFORMATION DISCLOSURE CITATION

(Use several sheets if necessary)

PTO Form 1449

Attorney Docket 044574-5044-US

Application No. 09/856,274

Applicants: Sulayman Dib-Hajj *et al.*

Page 1 of 2

Filing Date: May 18, 2001

Group Art Unit: 1614

U.S. PATENT DOCUMENTS

Initial	Document No.	Date	Name	Class	Sub-Class	Filing Date
aa	5,731,284	03/24/1998	Williams	514	8	09/28/1995

FOREIGN PATENT DOCUMENTS

Document No.	Date	Country	Class	Sub-Class	Translation

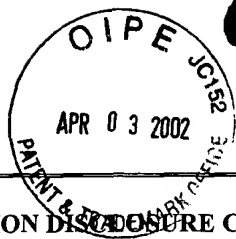
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)

ab	Akopian <i>et al.</i> (1996) A tetrodotoxin-resistant voltage-gated sodium channel expressed by sensory neurons, <i>Nature</i> 379:257-262
ac	Averill <i>et al.</i> (1995) Immunocytochemical localization of trkA receptors in chemically identified subgroups of adult rat sensory neurons, <i>Eur. J. Neurosci.</i> 7:1484-1494
ad	Bennett <i>et al.</i> (1996) trkA, CGRP and 1B4 expression in retrogradely labeled cutaneous and visceral primary sensory neurones in the rat, <i>Neurosci. Lett.</i> 206:33-36
ae	Bennett <i>et al.</i> (1998) A distinct subgroup of small DRG cells express GDNF receptor components and GDNF is protective for these neurons after nerve injury, <i>J. Neurosci.</i> 18:3059-3072
af	Caffrey <i>et al.</i> (1992) Three types of sodium channels in adult rat dorsal root ganglion neurons, <i>Brain Res.</i> 592:283-297
ag	Cummins <i>et al.</i> (1997) Downregulation of tetrodotoxin-resistant sodium currents and upregulation of a rapidly repriming tetrodotoxin-sensitive sodium current in small spinal sensory neurons after nerve injury, <i>J. Neurosci.</i> 17:3503-3514
ah	Dib-Hajj <i>et al.</i> (1996) Down-regulation of transcripts for Na channel alpha-SNS in spinal sensory neurons following axotomy, <i>Proc. Natl. Acad. Sci. USA</i> 93:14950-14954
ai	Dib-Hajj <i>et al.</i> (1998) Rescue of alpha-SNS sodium channel expression in small dorsal root ganglion neurons after axotomy by nerve growth factor in vivo, <i>J. Neurophysiol.</i> 79:2668-2676
aj	Dib-Hajj <i>et al.</i> (1998) NaN, a novel voltage-gated Na channel, is expressed preferentially in peripheral sensory neurons and down-regulated after axotomy, <i>Proc. Natl. Acad. Sci. USA</i> 95:8963-8968
ak	Gold <i>et al.</i> (1996) Hyperalgesic agents increase a tetrodotoxin-resistant Na ⁺ current in nociceptors, <i>Proc. Natl. Acad. Sci. USA</i> 93:1108-1112
al	Jeftinija (1994) The role of tetrodotoxin-resistant sodium channels of small primary afferent fibers, <i>Brain Res.</i> 639:125-134
am	Matzner <i>et al.</i> (1994) Hyperexcitability at sites of nerve injury depends on voltage-sensitive Na ⁺ channels, <i>J. Neurophysiol.</i> 72:349-359
an	Molliver <i>et al.</i> (1997) IB4-binding DRG neurons switch from NGF to GDNF dependence in early postnatal life, <i>Neuron</i> 19:849-861
ao	Okuse <i>et al.</i> (1997) Regulation of expression of the sensory neuron-specific sodium channel SNS in inflammatory and neuropathic pain, <i>Mol. Cell Neurosci.</i> 10:196-207

Examiner

Date Considered

Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



RECEIVED

APR 04 2002

TECH CENTER 1600/2900

INFORMATION DISCLOSURE CITATION (Use several sheets if necessary) PTO Form 1449		Attorney Docket 044574-5044-US	Application No. 09/856,274
		Applicants: Sulayman Dib-Hajj <i>et al.</i> Page 2 of 2	
		Filing Date: May 18, 2001	Group Art Unit: 1614
OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, etc.)			
	ap	Quasthoff <i>et al.</i> (1995) Calcium potentials and tetrodotoxin-resistant sodium potentials in unmyelinated C fibres of biopsied human sural nerve, <i>Neurosci.</i> 69:955-965	
	aq	Rizzo <i>et al.</i> (1995) Selective loss of slow and enhancement of fast Na ⁺ currents in cutaneous afferent dorsal root ganglion neurons following axotomy, <i>Neurobiol. Dis.</i> 2:87-96	
	ar	Roy <i>et al.</i> (1992) Differential properties of tetrodotoxin-sensitive and tetrodotoxin-resistant sodium channels in rat dorsal root ganglion neurons, <i>J. Neurosci.</i> 12:2104-2111	
	as	Sangameswaran <i>et al.</i> (1996) Structure and function of a novel voltage-gated tetrodotoxin-resistant sodium channel specific to sensory neurons, <i>J. Biol. Chem.</i> 271:5953-5956	
	at	Snider <i>et al.</i> (1998) Tackling pain at the source: new ideas about nociceptors, <i>Neuron</i> 20:629-632	
	au	Wright <i>et al.</i> (1995) Neurotrophin receptor mRNA expression defines distinct populations of neurons in rat dorsal root ganglia, <i>J. Comp. Neurol.</i> 351:329-338	
Examiner		Date Considered	
Examiner: Initial if reference considered, whether or not citation is in conformance with MPEP 609; draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.			